MSDS

Material Safety Data Sheet

Emergency Phone: CHEMTREC (800) 924-9300

1) Product Identification

Product	Manufacturing Location
Wood Dust	Various
Solid Lumber	Various
Wood Chips	Various
Wood Veneers	Various

Synonyms: Wood Flour, Sawdust, Sander Dust
Date Prepared: 12/10/85
Date Revised: 6/20/94

2) Hazardous Ingredients / Identity Information

Chemical or Common Name, CAS#	Percent	Exposure Limits[1]
Wood	100	OSHA PEL-TWA 5mg/m³ (a) OSHA PEL-STEL 10mg/m³ (a) ACGIH TLV-TWA 5mg/m³ (b) ACGIH TLV-STEL 10mg/m³ (b) ACGIH TLV-TWA 1mg/m³ (c) OSHA PEL-TWA 2.5mg/m³ (d)

(a) softwood or hardwood total dust
(b) softwood total dust
(c) selected hardwood total dust (beech, oak, others)
(d) western red cedar total dust

[1]Based on 1989 OSHA Permissible Exposure Limits (PEL)

Appearance and Odor:
Wood dust consists of finely divided wood particles generated from sawing, sanding, routing, or chipping solid dimensional lumber or other wood products. Wood chips are similar to wood dust, but coarser. The products have a slight aromatic odor. The wood component may consist of alder, aspen, beech, birch, cottonwood, fir, gum, hemlock, hickory, maple, oak, pecan, pine, poplar, spruce, and walnut.

3) Physical/Chemical Characteristics

Boiling Point (@ 760mm Hg):	NAP
Vapor Pressure (mm Hg):	NAP
Vapor Density (Air=1; 1atm):	NAP
Specific Gravity (H2O=1):	0.40 - 0.80
Melting Point:	NAP
Evaporation Rate (Butyl Acetate=1)	NAP
Solubility In Water (% by Weight)	<0.1
% Volatile By Volume @ 70°F (21°C):	0

4) Fire and Explosion Hazard Data

Flash Point (Method Used): **NAP**
Flammable Limits:
LEL: See below under "Unusual Fire and Explosion Hazards"
UEL: NAP
Extinguishing Media:
Water, carbon dioxide, sand
Autoignition Temperature (F or C): 400ºF-500ºF
Special Firefighting Procedures:
Use water to wet down wood dust to reduce the likelihood of ignition or dispersion of dust into the air. Remove burned, charred dust to open, secure area after fire is extinguished.
Unusual Fire and Explosion Hazards:
Depending on moisture content and more importantly, particle diameter, wood dust may explode in the presence of an ignition source. An airborne concentration of 40 grams (40,000 mg) of dust per cubic meter of air is often used as the LEL for wood dusts.

5) Reactivity Data

Stability:
( ) Unstable (x) Stable
Conditions to Avoid: NAP
Incompatibility (Materials to Avoid):
Avoid contact with oxidizing agents and drying oils. Avoid open flame. Product may ignite at temperatures in excess of 400ºF.
Hazardous Decomposition or By-Products:
Thermal decomposition products include carbon monoxide, carbon dioxide, aliphatic aldehydes, rosin acids, terpenes, polycyclic aromatic hydrocarbons.
Hazardous Polymerization:
( ) May Occur (x) Will Not Occur

6) Precautions For Safe Handling and Use

Steps To Be Taken In Case Material Is Released Or Spilled:
Not applicable for product in purchased form. Wood dust generated from sawing, sanding, drilling, or routing of this product may be vacuumed or shoveled for recovery or disposal. Avoid dusty conditions and provide good ventilation. Use NIOSH/MSHA-approved respirator and goggles where ventilation is not possible.
Waste Disposal Method:
If disposed of or discarded in its purchased form, incineration is preferable. Dry land disposal is acceptable in most states. It is, however, the users responsibility to determine at the time of disposal whether your product meets RCRA criteria for hazardous waste. Follow applicable federal, state and local regulations.
Precautions To Be Taken In Handling and Storage:
No special handling precautions are required. Keep in a cool, dry place away from open flame.
Other Precautions:
A NIOSH/MSHA-approved respirator and goggles should be worn when the allowable limits may be exceeded. Avoid open flame and contact with oxidizing agents and drying oils.

7) Health Hazard Data

Primary Health Hazards:
The primary health hazard posed by this product is thought to be from inhaling wood dust.
Primary Route(s) of Exposure:
( ) Ingestion
(x) Skin: Dust
(x) Inhalation: Dust
Acute Health Hazards - Signs and Symptoms of Exposure/Emergency and First-Aid Procedures:
Ingestion: Not applicable under normal use.
Eye Contact: Wood dust may cause mechanical irritation. Treat dust in eye as foreign object. Flush with water to remove dust particles. Get medical help if irritation persists.
Skin Contact: Wood dust(s) of certain species can elicit allergic contact dermatitis in sensitized individuals, as well as mechanical irritation resulting in erythema and hives. Get medical help if rash, irritation or dermatitis persists.
Skin absorption: Not known to occur under normal use.
Inhalation: Wood dust may cause unpleasant deposit/obstruction in the nasal passages, resulting in dryness of nose, dry cough, sneezing and headaches. Remove to fresh air. Get medical help if persistant irritation, severe coughing or breathing difficulty occurs.
Medical Conditions Generally Aggravated by Exposure:
Wood dust may aggravate preexisting respiratory conditions or allergies.
Chronic Health Hazards:
Wood dust(s), depending on the species, may cause allergic contact dermatitis with prolonged, repetitive contact, and respiratory sensitization after prolonged exposure to elevated dust levels.
Carcinogenicity Listing:
( ) NTP Not Listed
( ) IARC Monographs: Not Listed
( ) OSHA Regulated: Not Listed
Wood dust has been alleged to cause nasal/paranasal sinus cancer (certain European hardwoods: oak and beech).

8) Control Measures

Personal Protective Equipment:
Respiratory Protection: A NIOSH/MSHA-approved respirator is recommended when allowable exposure limits may be exceeded.
Protective Gloves: Not required. However, cloth , canvas or leather gloves are recommended to minimize potential mechanical irritation from handling product.
Eye Protection: Not applicable for product in purchased form. Goggles or safety glasses are recommended when machining this product and in areas with high dust levels.
Other Protective Clothing or Equipment: Not applicable for product in purchased form. Outer garments may be desirable in extremely dusty areas.
Work/Hygiene Practices: Follow good hygenic and housekeeping practices. Clean up areas where wood dust settles to avoid excessive accumulation of this combustible material. Minimize blowdown or other practices that generate high airborne-dust concentrations.
Ventilation:
Local Exhaust: Provide local exhaust as needed so that exposure limits are met.
Mechanical(General): Provide general ventilation in processing and storage areas so that exposure limits are met.
Special: Self-contained breathing apparatus (SCBA) recommended when fighting fire.
Other: NAP

9) Transportation Data

DOT Proper Shipping Name: Not Regulated*
Hazard Class/Division Number:
ID Number:
Packing Group:
Label/Placard Required:
DOT Hazardous Substance:
*Some states require load to be covered to transport.

10) User's Responsibility

The information contained in this Material Safety Data Sheet is based on the experience of occupational health and safety professionals and comes from sources beleived to be accurate or otherwise technically correct. It is the user's responsibility to determine if this information is suitable for their applications and to follow safety precautions as may be necessary. The user has the responsibility to make sure that this sheet is the most up to date issue.

Additional Information
Definition of Common Terms:

ACGIH	American Conference of Govermental Industrial Hygienists
C	Ceiling Limit
CAS#	Chemical Abstracts System Number
IARC	International Agency for Research On Cancer
MSHA	Mining Safety and Health Administration
NAP	Not Applicable
NAV	Not Available
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
STEL	Short-Term Exposure Limit (15 minutes)
TLV	Threshold Limit Value
TWA	Time Weighted Average (8 hours)

High Density (HDF), Medium Density (MDF) & Light Density (LDF) Fiberboard

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

Revision Date: 06/16/2015 Date of issue: 06/16/2015 Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: High Density (HDF), Medium Density (MDF) & Light Density (LDF) Fiberboard

1.2. Intended Use of the Product Not available

1.3. Name, Address, and Telephone of the Responsible Party

Company

Plum Creek Timber Company
P.O. Box 1990
Columbia Falls, MT 59912
T 406-892-6200
www.plumcreek.com

Manufacturer

Plum Creek MDF, Inc
265 Meadow Lake Blvd.
Columbia Falls, MT 59912

1.4. Emergency Telephone Number

Emergency Number : 406-892-6200

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

Comb. Dust
Carc. 1A H350
Repr. 2 H361
STOT RE 1 H372
Aquatic Acute 3 H402

Full text of H-phrases: see section 16

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US) :

GHS08

Signal Word (GHS-US) : Danger

Hazard Statements (GHS-US) : May form combustible dust concentrations in air.
H350 - May cause cancer.
H361 - Suspected of damaging fertility or the unborn child.
H372 - Causes damage to organs through prolonged or repeated exposure.
H402 - Harmful to aquatic life.

Precautionary Statements (GHS-US) : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe vapors, mist, or spray.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, and eye protection.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P314 - Get medical advice/attention if you feel unwell.
P405 - Store locked up.
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US) No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixture

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Wood dust, soft woods	(CAS No) RR-00514-1	88 - 92	Comb. Dust Carc. 1A, H350 STOT RE 1, H372
Slack wax, petroleum	(CAS No) 64742-61-6	< 1	Carc. 1B, H350 Repr. 2, H361 STOT RE 1, H372
Ammonia	(CAS No) 7664-41-7	< 1	Flam. Gas 2, H221 Liquefied gas, H280 Acute Tox. 3 (Inhalation:gas), H331 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 2, H411

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

Skin Contact: Remove contaminated clothing. Drench affected area with water for several minutes. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for several minutes. Obtain medical attention if pain, blinking or redness persists. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: May cause cancer. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Dust may cause mechanical irritation to eyes, nose, throat, and lungs.

Inhalation: May cause cancer by inhalation.

Skin Contact: Prolonged contact with large amounts of dust may cause mechanical irritation.

Eye Contact: Eye contact with large amounts of dust may cause mechanical irritation.

Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: Causes damage to organs through prolonged or repeated exposure. May cause cancer. May damage fertility. May damage the unborn child.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Alcohol-resistant foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable Extinguishing Media: Do not use a heavy water stream.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Combustible Dust. Dust explosion hazard in air. Supports combustion. High temperatures. Under conditions of fire this material may produce: Carbon dioxide. Carbon monoxide.

Explosion Hazard: Avoid dust clouds in combination with static electricity. Dust clouds can be explosive.

Reactivity: Stable at ambient temperature and under normal conditions of use.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Exercise caution when fighting any chemical fire. Do not allow run-off from fire fighting to enter drains or water courses.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO_2).

Other Information: Refer to Section 9 for flammability properties.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid generating dust. Handle in accordance with good industrial hygiene and safety practice. Good housekeeping is needed during storage, transfer, handling, and use of this material to avoid excessive dust accumulation. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Eliminate ignition sources.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Material for Containment and Cleaning Up

Methods for Cleaning Up: Collect spillage. Avoid generation of dust during clean-up of spills. Vacuum must be fitted with HEPA filter to prevent release of particulates during clean-up. Practice good housekeeping - spillage can be slippery on smooth surface either wet or dry.

6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Keep only in the original container in a cool, well ventilated place away from: Direct sunlight, Heat sources. Keep container closed when not in use. Protect from moisture.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

7.3. Specific End Use(s) Not available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Wood dust, soft woods (RR-00514-1)		
USA NIOSH	NIOSH REL (TWA) (mg/m^3)	1 mg/m^3
Alberta	OEL TWA (mg/m^3)	5 mg/m^3 (total)

Nunavut	OEL STEL (mg/m³)	10 mg/m³
Nunavut	OEL TWA (mg/m³)	5 mg/m³
Northwest Territories	OEL STEL (mg/m³)	10 mg/m³
Northwest Territories	OEL TWA (mg/m³)	5 mg/m³
Québec	VEMP (mg/m³)	5 mg/m³ (except red cedar, containing no Asbestos and <1% Crystalline silica-total dust)
Yukon	OEL STEL (mg/m³)	10 mg/m³ (non-allergenic) 5 mg/m³ (allergenic, including cedar, mahogany, teak)
Yukon	OEL TWA (mg/m³)	5 mg/m³ (non-allergenic) 2.5 mg/m³ (allergenic, including cedar, mahogany, teak)
Ammonia (7664-41-7)		
Mexico	OEL TWA (mg/m³)	18 mg/m³
Mexico	OEL TWA (ppm)	25 ppm
Mexico	OEL STEL (mg/m³)	27 mg/m³
Mexico	OEL STEL (ppm)	35 ppm
USA ACGIH	ACGIH TWA (ppm)	25 ppm
USA ACGIH	ACGIH STEL (ppm)	35 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	35 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	50 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	18 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	25 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m³)	27 mg/m³
USA NIOSH	NIOSH REL (STEL) (ppm)	35 ppm
USA IDLH	US IDLH (ppm)	300 ppm
Alberta	OEL STEL (mg/m³)	24 mg/m³
Alberta	OEL STEL (ppm)	35 ppm
Alberta	OEL TWA (mg/m³)	17 mg/m³
Alberta	OEL TWA (ppm)	25 ppm
British Columbia	OEL STEL (ppm)	35 ppm
British Columbia	OEL TWA (ppm)	25 ppm
Manitoba	OEL STEL (ppm)	35 ppm
Manitoba	OEL TWA (ppm)	25 ppm
New Brunswick	OEL STEL (mg/m³)	24 mg/m³
New Brunswick	OEL STEL (ppm)	35 ppm
New Brunswick	OEL TWA (mg/m³)	17 mg/m³
New Brunswick	OEL TWA (ppm)	25 ppm
Newfoundland & Labrador	OEL STEL (ppm)	35 ppm
Newfoundland & Labrador	OEL TWA (ppm)	25 ppm
Nova Scotia	OEL STEL (ppm)	35 ppm
Nova Scotia	OEL TWA (ppm)	25 ppm
Nunavut	OEL STEL (mg/m³)	24 mg/m³
Nunavut	OEL STEL (ppm)	35 ppm
Nunavut	OEL TWA (mg/m³)	17 mg/m³
Nunavut	OEL TWA (ppm)	25 ppm
Northwest Territories	OEL STEL (mg/m³)	24 mg/m³
Northwest Territories	OEL STEL (ppm)	35 ppm
Northwest Territories	OEL TWA (mg/m³)	17 mg/m³
Northwest Territories	OEL TWA (ppm)	25 ppm
Ontario	OEL STEL (ppm)	35 ppm

Ontario	OEL TWA (ppm)	25 ppm
Prince Edward Island	OEL STEL (ppm)	35 ppm
Prince Edward Island	OEL TWA (ppm)	25 ppm
Québec	VECD (mg/m³)	24 mg/m³
Québec	VECD (ppm)	35 ppm
Québec	VEMP (mg/m³)	17 mg/m³
Québec	VEMP (ppm)	25 ppm
Saskatchewan	OEL STEL (ppm)	35 ppm
Saskatchewan	OEL TWA (ppm)	25 ppm
Yukon	OEL STEL (mg/m³)	30 mg/m³
Yukon	OEL STEL (ppm)	40 ppm
Yukon	OEL TWA (mg/m³)	18 mg/m³
Yukon	OEL TWA (ppm)	25 ppm

8.2. Exposure Controls

Appropriate Engineering Controls: Provide adequate ventilation to minimize dust concentrations. Ensure all national/local regulations are observed. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment.

Personal Protective Equipment: Dust formation: dust mask. Gloves. Protective goggles. Dustproof clothing.

Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Approved dust mask is required for some finishing operations such as sawing or sanding where dust is created.

Environmental Exposure Controls: Do not allow the product to be released into the environment.

Consumer Exposure Controls: Do not eat, drink or smoke during use

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	:	Solid
Appearance	:	Not available
Odor	:	Not available
Odor Threshold	:	Not available
pH	:	Not available
Evaporation Rate	:	Not available
Melting Point	:	Not available
Freezing Point	:	Not available
Boiling Point	:	Not available
Flash Point	:	Not available
Auto-ignition Temperature	:	Not available
Decomposition Temperature	:	Not available
Flammability (solid, gas)	:	Not available
Lower Flammable Limit	:	Not available
Upper Flammable Limit	:	Not available
Vapor Pressure	:	Not available

Relative Vapor Density at 20 °C	:	Not available
Relative Density	:	Not available
Specific Gravity	:	Not available
Solubility	:	Not available
Partition Coefficient: N-Octanol/Water	:	Not available
Viscosity	:	Not available
Explosion Data – Sensitivity to Mechanical Impact	:	Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge	:	Static discharge could act as an ignition source.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Stable at ambient temperature and under normal conditions of use.

10.2. Chemical Stability: Stable under normal conditions.

10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

10.4. Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Protect from moisture. Use good housekeeping practices during storage, transfer, and handling, to avoid excessive dust accumulation.

10.5. Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

10.6. Hazardous Decomposition Products: Under conditions of fire this material may produce: Carbon oxides (CO, CO2).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Acute Toxicity: Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not available

Carcinogenicity: May cause cancer.

Specific Target Organ Toxicity (Repeated Exposure): Causes damage to organs through prolonged or repeated exposure.

Reproductive Toxicity: Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: May cause cancer by inhalation.

Symptoms/Injuries After Skin Contact: Prolonged contact with large amounts of dust may cause mechanical irritation.

Symptoms/Injuries After Eye Contact: Eye contact with large amounts of dust may cause mechanical irritation.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: Causes damage to organs through prolonged or repeated exposure. May cause cancer. May damage fertility. May damage the unborn child.

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Ammonia (7664-41-7)	
LC50 Inhalation Rat	5.1 mg/l (Exposure time: 1 h)
LC50 Inhalation Rat	2000 ppm/4h (Exposure time: 4 h)
ATE US (vapors)	5.10 mg/l/4h
ATE US (dust, mist)	5.10 mg/l/4h

Wood dust, soft woods (RR-00514-1)	
IARC Group	1
National Toxicology Program (NTP) Status	Known Human Carcinogens.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Harmful to aquatic life with long lasting effects. Harmful to aquatic life.

Ammonia (7664-41-7)	
LC50 Fish 1	0.44 mg/l (Exposure time: 96 h - Species: Cyprinus carpio)
EC50 Daphnia 1	25.4 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	0.26 - 4.6 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)

12.2. Persistence and Degradability

High Density (HDF), Medium Density (MDF) & Light Density (LDF) Fiberboard	
Persistence and Degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative Potential

High Density (HDF), Medium Density (MDF) & Light Density (LDF) Fiberboard	
Bioaccumulative Potential	Not established.

Ammonia (7664-41-7)	
Log Pow	-1.14 (at 25 °C)

12.4. Mobility in Soil

Not available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

SECTION 14: TRANSPORT INFORMATION

14.1. In Accordance with DOT Not regulated for transport

14.2. In Accordance with IMDG Not regulated for transport

14.3. In Accordance with IATA Not regulated for transport

14.4. In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

High Density (HDF), Medium Density (MDF) & Light Density (LDF) Fiberboard	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard

Slack wax, petroleum (64742-61-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Ammonia (7664-41-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on the United States SARA Section 302 Listed on United States SARA Section 313	
SARA Section 302 Threshold Planning Quantity (TPQ)	500
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Sudden release of pressure hazard
SARA Section 313 - Emission Reporting	1.0 % (includes anhydrous Ammonia and aqueous Ammonia from water dissociable Ammonium salts and other sources, 10% of total aqueous Ammonia is reportable under this listing)

15.2. US State Regulations

Wood dust, soft woods (RR-00514-1)	
U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.

Formaldehyde (50-00-0)	
U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.

Wood dust, soft woods (RR-00514-1)
U.S. - New Jersey - Right to Know Hazardous Substance List

Ammonia (7664-41-7)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

15.3. Canadian Regulations

High Density (HDF), Medium Density (MDF) & Light Density (LDF) Fiberboard	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Wood dust, soft woods (RR-00514-1)	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Slack wax, petroleum (64742-61-6)
Listed on the Canadian DSL (Domestic Substances List)

Ammonia (7664-41-7)	
Listed on the Canadian DSL (Domestic Substances List) Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class A - Compressed Gas Class B Division 1 - Flammable Gas Class D Division 1 Subdivision A - Very toxic material causing immediate and serious toxic effects Class E - Corrosive Material

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 06/16/2015

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Acute Tox. 3 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 3
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Carc. 1A	Carcinogenicity Category 1A
Carc. 1B	Carcinogenicity Category 1B

Comb. Dust	Combustible Dust
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Flam. Gas 2	Flammable gases Category 2
Liquefied gas	Gases under pressure Liquefied gas
Repr. 2	Reproductive toxicity Category 2
Skin Corr. 1B	Skin corrosion/irritation Category 1B
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H221	Flammable gas
Comb. Dust	May form combustible dust concentrations in air
H280	Contains gas under pressure; may explode if heated
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H331	Toxic if inhaled
H335	May cause respiratory irritation
H350	May cause cancer
H361	Suspected of damaging fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H411	Toxic to aquatic life with long lasting effects

Party Responsible for the Preparation of This Document

Plum Creek Timber Company

Phone Number: 406-892-6200

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS US 2012 & WHMIS 2

Particleboard

Safety Data Sheet

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Revision Date: 05/18/2018 Supersedes Date: 12/10/2015

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: PB, Ultra PB, Duraflake PB, Decoratively Surfaced Particleboard, Vesta ULEF PB

Synonyms: Ultra Standard, Ultra Plus, Ultra Custom, Ultra Door Core, Ultra Mende, Ultra MR, Duraflake Standard, Duraflake Plus, Duraflake High Plus, Duraflake Door Core, Duraflake MZ, Duraflake DL, Duraflake UL, Ultra Vesta ULEF, Duraflake Vesta ULEF, Duraflake Vesta MR ULEF, Vesta Door Core ULEF, also includes the above products that are decoratively surfaced with thermally-fused laminate (TFL) and/or paint/print coatings.

Product Description: A panel product manufactured from cellulosic fiber materials bonded together with a synthetic resin or other suitable binder, and which may contain additives.

1.2. Intended Use of the Product

Re-manufacturing, construction, lamination and furniture processes

1.3. Name, Address, and Telephone of the Responsible Party

Company

ARAUCO North America
400 Perimeter Center Terrace
Suite 750
Atlanta, GA
800-261-4890
https://www.arauco.cl/na/

1.4. Emergency Telephone Number

Emergency Number : 803-431-2046 (Monday – Friday 8:00am ET – 5:00pm ET)

SECTION 2: HAZARDS IDENTIFICATION

This is a wood product composed of wood and cured amino resins. Wood Dust: the hazard information denoted in this SDS apply only when the product is altered downstream by cutting, sawing, sanding, heating or other means and significant dust or fume is generated. In its shipped and finished form, this product is not considered hazardous. Formaldehyde: This product contains less than 0.1% free formaldehyde. Residual formaldehyde gas may be released from this product. The amount and level will depend on local conditions of use. Formaldehyde gas is irritating to the eyes and upper respiratory tract and may aggravate existing respiratory conditions or allergies. Formaldehyde may cause cancer.

2.1. Classification of the Substance or Mixture

GHS-US/CA Classification

Skin Irrit. 2	H315
Eye Irrit. 2	H319
Resp. Sens. 1	H334
Skin Sens. 1	H317
Carc. 1A	H350
STOT SE 3	H335
STOT RE 1	H372
Comb. Dust	

Full text of hazard classes and H-statements : see section 16

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2.2. Label Elements

GHS-US/CA Labeling

Hazard Pictograms (GHS-US/CA) :

GHS07 GHS08

Signal Word (GHS-US/CA) : Danger

Hazard Statements (GHS-US/CA) : May form combustible dust concentrations in air if converted to small particles during further processing, handling, or by other means.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H334 - May cause an allergy or asthma symptoms or breathing difficulties if inhaled.
H335 - May cause respiratory irritation.
H350 - May cause cancer (Inhalation).
H372 - Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation).

Precautionary Statements (GHS-US/CA) : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe dust or fume.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear protective gloves, protective clothing, and eye protection.
P284 - [In case of inadequate ventilation] wear respiratory protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P312 - Call a POISON CENTER or doctor if you feel unwell.
P314 - Get medical advice/attention if you feel unwell.
P321 - Specific treatment (see section 4 on this SDS).
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Supplemental Information : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Proper grounding procedures to avoid static electricity should be followed. Prevent dust accumulation (to minimize explosion hazard). Avoid generating dust.

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2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US/CA)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product Identifier	% *	GHS Ingredient Classification
Ligno-cellulosic materials	(CAS-No.) Not applicable	80 - 92	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 1A, H350 STOT SE 3, H335 STOT RE 1, H372 Comb. Dust
Urea, polymer with formaldehyde	(CAS-No.) 9011-05-6	<= 17.2	Not classified
Urea, polymer with formaldehyde and 1,3,5-triazine-2,4,6-triamine	(CAS-No.) 25036-13-9	2 - 17	Flam. Liq. 3, H226 Eye Irrit. 2, H319
Formaldehyde-melamine polymer*	(CAS-No.) 9003-08-1	<= 2.8	Not classified
Ammonium sulfate	(CAS-No.) 7783-20-2	<= 2.3	Aquatic Acute 3, H402
Titanium dioxide*	(CAS-No.) 13463-67-7	<= 1.55	Carc. 2, H351
Urea	(CAS-No.) 57-13-6	0.03 - 1.1	Comb. Dust
Slack wax, petroleum	(CAS-No.) 64742-61-6	0.1 - 1	Not classified
Carbon black*	(CAS-No.) 1333-86-4	<= 1	Carc. 2, H351 Comb. Dust
Ammonium chloride	(CAS-No.) 12125-02-9	<= 0.2	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Acute 3, H402 Comb. Dust
Formaldehyde	(CAS-No.) 50-00-0	< 0.1	Flam. Liq. 4, H227 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:gas), H331 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Muta. 2, H341 Carc. 1A, H350 STOT SE 3, H335 Aquatic Acute 2, H401
Diethylene glycol*	(CAS-No.) 111-46-6	<= 0.05	Acute Tox. 4 (Oral), H302 STOT RE 2, H373

Full text of H-phrases: see section 16

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Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%). Ingredients noted with * are ingredients used in either TFL or painted/printed decorative surfacing.
This is a wood product composed of wood and cured amino resins. The hazard information denoted in this SDS apply only when the product is altered downstream by cutting, sawing, sanding, heating or other means and significant dust or fume is generated. In its shipped and finished form, this product is not considered hazardous. This product contains less than 0.1% free formaldehyde. Residual formaldehyde gas may be released from this product. The amount and level will depend on local conditions of use. Formaldehyde gas is irritating to the eyes and upper respiratory tract and may aggravate existing respiratory conditions or allergies. Formaldehyde may cause cancer.

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: Using proper respiratory protection, move the exposed person to fresh air at once. Encourage exposed person to cough, spit out, and blow nose to remove dust. Immediately call a poison center, physician, or emergency medical service.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: Causes serious eye irritation. Causes skin irritation. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Skin sensitization. Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation). May cause cancer (Inhalation).

Inhalation: Irritation of the respiratory tract and the other mucous membranes. Exposure may produce cough, mucous secretions, shortness of breath, chest tightness or other symptoms indicative of an allergic/sensitization reaction. Dust may be harmful or cause irritation.

Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic skin reaction.

Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: May cause cancer by inhalation. Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation).

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but will burn at high temperatures. Dust generated from processing may present a dust explosion hazard.

Explosion Hazard: The following applies to the product if it is cut, sanded or altered in such a way that excessive and/or significant particulates and/or dusts may be generated: Dust explosion hazard in air.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

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Firefighting Instructions: Use water spray or fog for cooling exposed containers. Do not breathe fumes from fires or vapors from decomposition.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO_2). Nitrogen oxides. Sodium oxides. Potassium oxides. Titanium oxides. Sulfur oxides. Ammonium chloride. Amines. Aldehydes. Hydrogen cyanide. Formaldehyde. Formaldeyhde is a potential carcinogen and can act as a potential skin and respiratory sensitizer. Formaldehyde can also cause respiratory and eye irritation.

Other Information: Fine dust dispersed in air may ignite.

Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid generating dust. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Remove ignition sources. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams. Avoid generation of dust during clean-up of spills.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal. For particulates and dust: Vacuum clean-up is preferred. If sweeping is required use a dust suppressant. Use explosion proof vacuum during cleanup, with appropriate filter. Do not mix with other materials. Use only non-sparking tools. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Accumulation and dispersion of dust with an ignition source can cause a combustible dust explosion. Keep dust levels to a minimum and follow applicable regulations.

Precautions for Safe Handling: Handle in accordance with good industrial hygiene and safety procedures. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. For particulates and dust: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid contact with eyes, skin and clothing. Do not breathe dust. Avoid creating or spreading dust. Keep away from heat, sparks, open flames, hot surfaces. – No smoking.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Avoid creating or spreading dust. For particulates and dust: Use explosion-proof electrical, ventilating, lighting equipment. Proper grounding procedures to avoid static electricity should be followed.

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Storage Conditions: Keep container closed when not in use. Store in a dry, cool and well-ventilated place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area.

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

7.3. Specific End Use(s)

Building Materials –Decorative, Furniture, General Construction

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Wood dust, all soft and hard woods		
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1 mg/m³
Alberta	OEL TWA (mg/m³)	5 mg/m³ (total)
Québec	VEMP (mg/m³)	5 mg/m³ (except red cedar, containing no Asbestos and <1% Crystalline silica-total dust)
Yukon	OEL STEL (mg/m³)	10 mg/m³ (non-allergenic) 5 mg/m³ (allergenic, including cedar, mahogany, teak)
Yukon	OEL TWA (mg/m³)	5 mg/m³ (non-allergenic) 2.5 mg/m³ (allergenic, including cedar, mahogany, teak)

Urea (57-13-6)		
USA AIHA	WEEL TWA (mg/m³)	10 mg/m³

Formaldehyde (50-00-0)		
Mexico	OEL Ceiling (mg/m³)	3 mg/m³
Mexico	OEL Ceiling (ppm)	2 ppm
USA ACGIH	ACGIH TWA (ppm)	0.1 ppm
USA ACGIH	ACGIH STEL (ppm)	0.3 ppm
USA ACGIH	ACGIH chemical category	dermal sensitizer,Confirmed Human Carcinogen
USA OSHA	OSHA PEL (TWA) (ppm)	0.75 ppm
USA OSHA	OSHA PEL (STEL) (ppm)	2 ppm (see 29 CFR 1910.1048)
USA NIOSH	NIOSH REL (TWA) (ppm)	0.016 ppm
USA NIOSH	NIOSH REL (ceiling) (ppm)	0.1 ppm
USA IDLH	US IDLH (ppm)	20 ppm
Alberta	OEL Ceiling (mg/m³)	1.3 mg/m³
Alberta	OEL Ceiling (ppm)	1 ppm
Alberta	OEL TWA (mg/m³)	0.9 mg/m³
Alberta	OEL TWA (ppm)	0.75 ppm
British Columbia	OEL Ceiling (ppm)	1 ppm
British Columbia	OEL TWA (ppm)	0.3 ppm
Manitoba	OEL STEL (ppm)	0.3 ppm
Manitoba	OEL TWA (ppm)	0.1 ppm
New Brunswick	OEL STEL (ppm)	1.5 ppm
New Brunswick	OEL TWA (ppm)	0.5 ppm
Newfoundland & Labrador	OEL STEL (ppm)	0.3 ppm
Newfoundland & Labrador	OEL TWA (ppm)	0.1 ppm
Nova Scotia	OEL STEL (ppm)	0.3 ppm
Nova Scotia	OEL TWA (ppm)	0.1 ppm

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Nunavut	OEL Ceiling (ppm)	0.3 ppm
Northwest Territories	OEL Ceiling (ppm)	0.3 ppm
Ontario	OEL Ceiling (ppm)	1.5 ppm
Ontario	OEL STEL (ppm)	1 ppm
Prince Edward Island	OEL STEL (ppm)	0.3 ppm
Prince Edward Island	OEL TWA (ppm)	0.1 ppm
Québec	PLAFOND (mg/m³)	3 mg/m³
Québec	PLAFOND (ppm)	2 ppm
Saskatchewan	OEL Ceiling (ppm)	0.3 ppm
Yukon	OEL Ceiling (mg/m³)	3 mg/m³
Yukon	OEL Ceiling (ppm)	2 ppm

Titanium dioxide (13463-67-7)		
Mexico	OEL TWA (mg/m³)	10 mg/m³
Mexico	OEL STEL (mg/m³)	20 mg/m³
USA ACGIH	ACGIH TWA (mg/m³)	10 mg/m³
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (total dust)
USA IDLH	US IDLH (mg/m³)	5000 mg/m³
Alberta	OEL TWA (mg/m³)	10 mg/m³
British Columbia	OEL TWA (mg/m³)	10 mg/m³ (total dust) 3 mg/m³ (respirable fraction)
Manitoba	OEL TWA (mg/m³)	10 mg/m³
New Brunswick	OEL TWA (mg/m³)	10 mg/m³
Newfoundland & Labrador	OEL TWA (mg/m³)	10 mg/m³
Nova Scotia	OEL TWA (mg/m³)	10 mg/m³
Nunavut	OEL STEL (mg/m³)	20 mg/m³
Nunavut	OEL TWA (mg/m³)	10 mg/m³
Northwest Territories	OEL STEL (mg/m³)	20 mg/m³
Northwest Territories	OEL TWA (mg/m³)	10 mg/m³
Ontario	OEL TWA (mg/m³)	10 mg/m³
Prince Edward Island	OEL TWA (mg/m³)	10 mg/m³
Québec	VEMP (mg/m³)	10 mg/m³ (containing no Asbestos and <1% Crystalline silica-total dust)
Saskatchewan	OEL STEL (mg/m³)	20 mg/m³
Saskatchewan	OEL TWA (mg/m³)	10 mg/m³
Yukon	OEL STEL (mg/m³)	20 mg/m³
Yukon	OEL TWA (mg/m³)	30 mppcf 10 mg/m³

Carbon black (1333-86-4)		
Mexico	OEL TWA (mg/m³)	3.5 mg/m³
Mexico	OEL STEL (mg/m³)	7 mg/m³
USA ACGIH	ACGIH TWA (mg/m³)	3 mg/m³ (inhalable particulate matter)
USA ACGIH	ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
USA OSHA	OSHA PEL (TWA) (mg/m³)	3.5 mg/m³

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USA NIOSH	NIOSH REL (TWA) (mg/m³)	3.5 mg/m³ 0.1 mg/m³ (Carbon black in presence of Polycyclic aromatic hydrocarbons)
USA IDLH	US IDLH (mg/m³)	1750 mg/m³
Alberta	OEL TWA (mg/m³)	3.5 mg/m³
British Columbia	OEL TWA (mg/m³)	3 mg/m³ (inhalable)
Manitoba	OEL TWA (mg/m³)	3 mg/m³ (inhalable particulate matter)
New Brunswick	OEL TWA (mg/m³)	3.5 mg/m³
Newfoundland & Labrador	OEL TWA (mg/m³)	3 mg/m³ (inhalable particulate matter)
Nova Scotia	OEL TWA (mg/m³)	3 mg/m³ (inhalable particulate matter)
Nunavut	OEL STEL (mg/m³)	7 mg/m³
Nunavut	OEL TWA (mg/m³)	3.5 mg/m³
Northwest Territories	OEL STEL (mg/m³)	7 mg/m³
Northwest Territories	OEL TWA (mg/m³)	3.5 mg/m³
Ontario	OEL TWA (mg/m³)	3 mg/m³ (inhalable)
Prince Edward Island	OEL TWA (mg/m³)	3 mg/m³ (inhalable particulate matter)
Québec	VEMP (mg/m³)	3.5 mg/m³
Saskatchewan	OEL STEL (mg/m³)	7 mg/m³
Saskatchewan	OEL TWA (mg/m³)	3.5 mg/m³
Yukon	OEL STEL (mg/m³)	7 mg/m³
Yukon	OEL TWA (mg/m³)	3.5 mg/m³

Diethylene glycol (111-46-6)		
USA AIHA	WEEL TWA (mg/m³)	10 mg/m³

Ammonium chloride (12125-02-9)		
Mexico	OEL TWA (mg/m³)	10 mg/m³ (fume)
Mexico	OEL STEL (mg/m³)	20 mg/m³ (fume)
USA ACGIH	ACGIH TWA (mg/m³)	10 mg/m³ (fume)
USA ACGIH	ACGIH STEL (mg/m³)	20 mg/m³ (fume)
USA NIOSH	NIOSH REL (TWA) (mg/m³)	10 mg/m³ (fume)
USA NIOSH	NIOSH REL (STEL) (mg/m³)	20 mg/m³ (fume)
Alberta	OEL STEL (mg/m³)	20 mg/m³ (fume)
Alberta	OEL TWA (mg/m³)	10 mg/m³ (fume)
British Columbia	OEL STEL (mg/m³)	20 mg/m³ (fume)
British Columbia	OEL TWA (mg/m³)	10 mg/m³ (fume)
Manitoba	OEL STEL (mg/m³)	20 mg/m³ (fume)
Manitoba	OEL TWA (mg/m³)	10 mg/m³ (fume)
New Brunswick	OEL STEL (mg/m³)	20 mg/m³ (fume)
New Brunswick	OEL TWA (mg/m³)	10 mg/m³ (fume)
Newfoundland & Labrador	OEL STEL (mg/m³)	20 mg/m³ (fume)
Newfoundland & Labrador	OEL TWA (mg/m³)	10 mg/m³ (fume)
Nova Scotia	OEL STEL (mg/m³)	20 mg/m³ (fume)
Nova Scotia	OEL TWA (mg/m³)	10 mg/m³ (fume)
Nunavut	OEL STEL (mg/m³)	20 mg/m³ (fume)
Nunavut	OEL TWA (mg/m³)	10 mg/m³ (fume)
Northwest Territories	OEL STEL (mg/m³)	20 mg/m³ (fume)
Northwest Territories	OEL TWA (mg/m³)	10 mg/m³ (fume)
Ontario	OEL STEL (mg/m³)	20 mg/m³ (fume)

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Ontario	OEL TWA (mg/m³)	10 mg/m³ (fume)
Prince Edward Island	OEL STEL (mg/m³)	20 mg/m³ (fume)
Prince Edward Island	OEL TWA (mg/m³)	10 mg/m³ (fume)
Québec	VECD (mg/m³)	20 mg/m³ (fume)
Québec	VEMP (mg/m³)	10 mg/m³ (fume)
Saskatchewan	OEL STEL (mg/m³)	20 mg/m³ (fume)
Saskatchewan	OEL TWA (mg/m³)	10 mg/m³ (fume)
Yukon	OEL STEL (mg/m³)	20 mg/m³ (fume)
Yukon	OEL TWA (mg/m³)	10 mg/m³ (fume)

8.2. Exposure Controls

Appropriate Engineering Controls: The following applies to the product if it is cut, sanded or altered in such a way that excessive and/or significant fumes, particulates, and/or dusts may be generated: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Use local exhaust or general dilution ventilation or other suppression methods to maintain dust levels below exposure limits. Power equipment should be equipped with proper dust collection devices. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.

Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	:	Solid
Appearance	:	Particleboard panel; Straw yellow (light brown)
Odor	:	No distinctive odor
Odor Threshold	:	Not available
pH	:	Not available
Evaporation Rate	:	Not available
Melting Point	:	Not available
Freezing Point	:	Not available
Boiling Point	:	Not available
Flash Point	:	Not available
Auto-ignition Temperature	:	425 - 475 °F (218.33 - 246.11 °C)
Decomposition Temperature	:	Not available
Flammability (solid, gas)	:	Not available

Particleboard

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Lower Flammable Limit	:	Not available
Upper Flammable Limit	:	Not available
Vapor Pressure	:	Not available
Relative Vapor Density at 20°C	:	Not available
Relative Density	:	Not available
Specific Gravity	:	Not available
Solubility	:	Insoluble in water.
Partition Coefficient: N-Octanol/Water	:	Not available
Viscosity	:	Not available
VOC content	:	0 %

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Hazardous reactions will not occur under normal conditions.

10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

10.4. Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials. Sparks, heat, open flame and other sources of ignition. Dust accumulation (to minimize explosion hazard).

10.5. Incompatible Materials: Strong acids, strong bases, strong oxidizers.

10.6. Hazardous Decomposition Products: Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates: Irritating fumes. Formaldehyde. Formaldehyde is a potential carcinogen and can act as a potential skin and respiratory sensitizer. Formaldehyde can also cause respiratory and eye irritation.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Acute Toxicity (Oral): Not classified

Acute Toxicity (Dermal): Not classified

Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Causes skin irritation.

Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: May cause an allergy or asthma symptons or breathing difficulties if inhaled. May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified

Carcinogenicity: May cause cancer (Inhalation).

Specific Target Organ Toxicity (Repeated Exposure): Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation).

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Irritation of the respiratory tract and the other mucous membranes. Exposure may produce cough, mucous secretions, shortness of breath, chest tightness or other symptoms indicative of an allergic/sensitization reaction. Dust may be harmful or cause irritation.

Symptoms/Injuries After Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Particleboard

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According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Chronic Symptoms: May cause cancer by inhalation. Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation).

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Urea, polymer with formaldehyde (9011-05-6)	
LD50 Oral Rat	8394 mg/kg
LD50 Dermal Rat	> 2100 mg/kg
LC50 Inhalation Rat	> 167 mg/m³ (Exposure time: 4 h)
Urea (57-13-6)	
LD50 Oral Rat	8471 mg/kg
Ammonium sulfate (7783-20-2)	
LD50 Oral Rat	> 2000 mg/kg
Formaldehyde (50-00-0)	
LD50 Oral Rat	100 mg/kg
LD50 Dermal Rat	270 mg/kg
ATE US/CA (gas)	700.00 ppmV/4h
Titanium dioxide (13463-67-7)	
LD50 Oral Rat	> 10000 mg/kg
Carbon black (1333-86-4)	
LD50 Oral Rat	> 8000 mg/kg
Formaldehyde-melamine polymer (9003-08-1)	
LD50 Oral Rat	> 10 g/kg
LD50 Dermal Rabbit	> 10 g/kg
Diethylene glycol (111-46-6)	
LD50 Oral Rat	1120 mg/kg
LD50 Dermal Rabbit	11890 mg/kg
Ammonium chloride (12125-02-9)	
LD50 Oral Rat	1650 mg/kg
Wood dust, all soft and hard woods	
IARC Group	1
National Toxicology Program (NTP) Status	Known Human Carcinogens.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.
Formaldehyde (50-00-0)	
IARC Group	1
National Toxicology Program (NTP) Status	Known Human Carcinogens.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.
OSHA Specifically Regulated Carcinogen List	In OSHA Specifically Regulated Carcinogen list.
Titanium dioxide (13463-67-7)	
IARC Group	2B
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.
Carbon black (1333-86-4)	
IARC Group	2B
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.

Particleboard

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According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Not classified.

Urea (57-13-6)	
LC50 Fish 1	16200 - 18300 mg/l (Exposure time: 96 h - Species: Poecilia reticulata)
EC50 Daphnia 1	3910 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

Ammonium sulfate (7783-20-2)	
LC50 Fish 1	53 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	121.7 mg/l (Exposure time: 48 h - Species: Daphnia magna)

Formaldehyde (50-00-0)	
LC50 Fish 1	22.6 - 25.7 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	2 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	1510 µg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 2	11.3 - 18 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

Carbon black (1333-86-4)	
EC50 Daphnia 1	5600 mg/l (Exposure time: 24 h - Species: Daphnia magna)

Diethylene glycol (111-46-6)	
LC50 Fish 1	75200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	84000 mg/l (Exposure time: 48 h - Species: Daphnia magna)

Ammonium chloride (12125-02-9)	
LC50 Fish 1	209 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [static])
EC50 Daphnia 1	161 mg/l
LC50 Fish 2	42.91 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
NOEC Chronic Fish	8 mg/l
NOEC Chronic Crustacea	14.6 mg/l

12.2. Persistence and Degradability

PB, Vesta ULEF PB, Decoratively Surfaced	
Persistence and Degradability	Not established.

12.3. Bioaccumulative Potential

PB, Vesta ULEF PB, Decoratively Surfaced	
Bioaccumulative Potential	Not established.

Urea (57-13-6)	
BCF Fish 1	< 10
Log Pow	-1.59 (at 25 °C)

Ammonium sulfate (7783-20-2)	
Log Pow	-5.1 (at 25 °C)

Formaldehyde (50-00-0)	
Log Pow	0.35 (at 25 °C)

Diethylene glycol (111-46-6)	
BCF Fish 1	100 - 180
Log Pow	-1.98 (at 25 °C)

12.4. Mobility in Soil

Not available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

Particleboard

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According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT Not regulated for transport

14.2. In Accordance with IMDG Not regulated for transport

14.3. In Accordance with IATA Not regulated for transport

14.4. In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

Particleboard	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard Fire hazard Sudden release of pressure hazard

Urea, polymer with formaldehyde (9011-05-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C)).

Urea, polymer with formaldehyde and 1,3,5-triazine-2,4,6-triamine (25036-13-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C)).

Slack wax, petroleum (64742-61-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Urea (57-13-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Ammonium sulfate (7783-20-2)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Formaldehyde (50-00-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on the United States SARA Section 302 Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	100 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	500 lb
SARA Section 313 - Emission Reporting	0.1 %

Titanium dioxide (13463-67-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

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According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Carbon black (1333-86-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

Formaldehyde-melamine polymer (9003-08-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C)).

Diethylene glycol (111-46-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

Ammonium chloride (12125-02-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
CERCLA RQ	5000 lb

15.2. US State Regulations

Wood dust, all soft and hard woods	
U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.

Formaldehyde (50-00-0)	
U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.

Titanium dioxide (13463-67-7)	
U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.

Carbon black (1333-86-4)	
U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.

Wood dust, all soft and hard woods
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Ammonium sulfate (7783-20-2)
U.S. - Massachusetts - Right To Know List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Formaldehyde (50-00-0)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances
U.S. - Pennsylvania - RTK (Right to Know) List

Titanium dioxide (13463-67-7)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Carbon black (1333-86-4)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List

Particleboard

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According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances
U.S. - Pennsylvania - RTK (Right to Know) List

Diethylene glycol (111-46-6)
U.S. - Pennsylvania - RTK (Right to Know) List

Ammonium chloride (12125-02-9)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

15.3. Canadian Regulations

Urea, polymer with formaldehyde (9011-05-6)
Listed on the Canadian DSL (Domestic Substances List)

Urea, polymer with formaldehyde and 1,3,5-triazine-2,4,6-triamine (25036-13-9)
Listed on the Canadian DSL (Domestic Substances List)

Slack wax, petroleum (64742-61-6)
Listed on the Canadian DSL (Domestic Substances List)

Urea (57-13-6)
Listed on the Canadian DSL (Domestic Substances List)

Ammonium sulfate (7783-20-2)
Listed on the Canadian DSL (Domestic Substances List)

Formaldehyde (50-00-0)
Listed on the Canadian DSL (Domestic Substances List)

Titanium dioxide (13463-67-7)
Listed on the Canadian DSL (Domestic Substances List)

Carbon black (1333-86-4)
Listed on the Canadian DSL (Domestic Substances List)

Formaldehyde-melamine polymer (9003-08-1)
Listed on the Canadian DSL (Domestic Substances List)

Diethylene glycol (111-46-6)
Listed on the Canadian DSL (Domestic Substances List)

Ammonium chloride (12125-02-9)
Listed on the Canadian DSL (Domestic Substances List)

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision : 05/18/2018

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17.

GHS Full Text Phrases:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2

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According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Carc. 1A	Carcinogenicity Category 1A
Carc. 2	Carcinogenicity Category 2
Comb. Dust	Combustible Dust
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 3	Flammable liquids Category 3
Flam. Liq. 4	Flammable liquids Category 4
Muta. 2	Germ cell mutagenicity Category 2
Resp. Sens. 1	Respiratory sensitization, Category 1
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization, Category 1
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H226	Flammable liquid and vapor
H227	Combustible liquid
H301	Toxic if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H334	May cause an allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H341	Suspected of causing genetic defects
H350	May cause cancer
H351	Suspected of causing cancer
H372	Causes damage to organs through prolonged or repeated exposure
H373	May cause damage to organs through prolonged or repeated exposure
H401	Toxic to aquatic life
H402	Harmful to aquatic life

NFPA Health Hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA Fire Hazard : 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.

Particleboard

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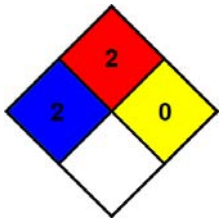
According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

NFPA Reactivity Hazard : 0 - Material that in themselves are normally stable, even under fire conditions.



HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur
* Chronic - Chronic (long-term) health effects may result from repeated overexposure

Flammability : 3 Serious Hazard

Physical : 0 Minimal Hazard

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. The information contained in this Safety Data Sheet is based on the experience of occupational health and safety professionals and comes from sources believed to be accurate or otherwise technically correct. It is the user's responsibility to determine if the product is suitable for its proposed application(s) and to follow necessary safety precautions. The user has the responsibility to make sure that this sheet is the most up-to-date issue. Arauco North America is a trade name used by Flakeboard Company Limited, Flakeboard America Limited, Arauco Panels USA LLC, and other North America affiliates, each of which is an independent company and is not liable or responsible for acts or obligations of its affiliates.

NA GHS SDS 2015 (Can, US, Mex)

Particleboard

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

GHS Label

Particleboard/MDF/Decoratively Surfaced Panels

ARAUCO North America, 400 Perimeter Center Terrace Suite 750 Atlanta, GA 30346
General Information: 800-261-4890

Danger

This is a wood product composed of wood and cured amino resins. Wood Dust: hazard information applies when the product is altered downstream by cutting, sawing, sanding, heating or other means and significant dust or fume is generated. In its shipped and finished form, this product is not considered hazardous. May form combustible dust concentrations in air if converted to small particles during further processing, handling, or by other means.
Formaldehyde: This product contains less than 0.1% free formaldehyde. Residual formaldehyde gas may be released from this product. The amount and level will depend on local conditions of use. Formaldehyde gas is irritating to the eyes and upper respiratory tract and may aggravate existing respiratory conditions or allergies. Formaldehyde may cause cancer.

Precautions:
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Refer to product SDS, available from your employer. Do not breathe dust or fume. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Proper grounding procedures to avoid static electricity should be followed. Prevent dust accumulation (to minimize explosion hazard). Avoid generating dust. Use proper dust collection systems and/or the use of a dust mask or other suitable personal protection equipment.

Prop 65 Warning

California Proposition 65 Notification Requirement

⚠ **WARNING**: Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Decoratively surfaced wood products (for example, decorative papers, or surfaced with paint or print) may also generate other inhalable trace particles which are known to the State of California to cause cancer (for example, airborne inhalable trace particles of titanium dioxide, and/or carbon black). Avoid inhaling wood dust and trace particles by using proper dust collection systems and/or the use of a dust mask or other suitable personal protection equipment. This product can expose you to formaldehyde, a substance known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov/wood.

Safety Data Sheet

PureBond® Domestic Veneer Core
Product ID#

Date of issue: June 1, 2020

(Prepared in accordance with OSHA HazCom Standard 29 CFR 1910.1200(g), Rev. 2012 & GHS Rev 03)

SECTION 1: PRODUCT AND COMPANY INFORMATION

Trade Name: PureBond brand name can be used together with these additional, proprietary Columbia sub-brand designations: JayCore®, KayCore®, CANAM Gold/CANAM Gold +/CANAM Silver, DesignEdge, MPX®, UV Wood (on PureBond panels), firststep®, LabCoat® (on PureBond panels), PlyPrints®, StainSelect® (on PureBond panels), Surelite®, Columbia Radius™ bending.plywood, Columbia Framestock, Appalachian Traditions (on PureBond substrates.)

Product Description: Decorative hardwood plywood assembled with domestic veneer core in assemblies laminated with Columbia's proprietary, formaldehyde-free, soy-based PureBond assembly process.

Domestic aspen/poplar veneer core lamination blanks and bending plywood without decorative hardwood face and back veneers laminated with Columbia's proprietary, formaldehyde-free, soy-based PureBond assembly process. Decorative rotary veneer and inner ply core veneer also covered by this document.

Synonyms: NAF (No-added formaldehyde) or NAUF (No-added urea formaldehyde) decorative hardwood plywood.

Company:
Columbia Forest Products
7900 McCloud Road, Suite 200
Greensboro, NC 27409
1-800-637-1609

E-mail Address: www.columbiaforestproducts.com
24 Hour Emergency Phone: Contact: Paul Davis, Marketing Communications Manager
503-330-1852

SECTION 2: HAZARD IDENTIFICATION

NOTE: This product is not hazardous in the form in which is shipped by the manufacture but it may produce hazardous airborne levels of wood dust by downstream activities (e.g., grinding, sanding, cutting) creating potential hazards as described below:

Classification of the Substance Or Mixture
United States (US)

Classification according to OSHA 29 CFR 1910.1200 HCS

This product is generally an article but is regulated under OSHA for the release of wood dust during mechanical operations releasing dust. The classifications below are based upon wood dust.

Skin Irritation Category 2
Eye Irritation Category 2B
Respiratory Sensitization Category 1
Skin Sensitization Category 1
Carcinogen Category 1A
Specific Target Organ Toxicity Single Exposure Category 3: Respiratory Tract Irritation

Other Classifications:
Combustible Dust (OSHA Defined Hazard) If converted to small particles during further processing, handling, or by other means, may form combustible dust concentrations in air.

Label elements

Label according to OSHA HCS 2012

Hazard pictograms

GHS07

GHS08

Signal word: Danger

Hazard statements:
Causes skin irritation
Causes eye irritation
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction
May cause cancer via inhalation of respirable dust
May cause respiratory irritation
May form combustible dust concentrations in air

Precautionary statements

Prevention:
Take precautionary measures against static discharge.
Avoid breathing dust.
Take off contaminated clothing and wash before reuse.

	In case of inadequate ventilation wear an approved respirator suitable for conditions of use. Do not eat, drink or smoke when manufacturing or installing this product.
Response:	IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms, following removal to fresh air, call a Doctor or other qualified medical professional. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs get medical advice/attention. If In Eyes: Rinse cautiously for several minutes. Remove contact lenses if present and easy to do so. If eye irritation persists, get medical advice.
Storage:	Store away from incompatible materials.
Disposal:	Dispose of waste and residues in accordance with local authority requirements.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures: Only hazardous components above the appropriate cut-off limit are shown below.

This product may produce hazardous airborne levels of wood dust while being handled by downstream users creating potential hazards as described below:

Component	CAS No.	Weight %	Hazard Classification According to Regulation
Wood Dust	Not listed RTECS #: ZC9850000	95.65%	**EU CLP:** Self Classified: Skin Irrit 2; Eye Irrit 2; Skin Sens 1; Resp Sens 1; STOT SE 3 (Resp Irrit), Carc 1A **OSHA HCS 2012**: Skin Irrit 2; Eye Irrit 2; Skin Sens 1; Resp Sens 1; STOT SE 3 (Resp Irrit), Carc 1A
Other components below the reportable levels. The specific chemical identity and/or percentage of composition has been held withheld as a trade secret		< 1%	

SECTION 4: FIRST AID MEASURES

Eye Contact: In case of eye contact, immediately rinse eyes thoroughly with plenty of water. If wearing contact lenses, remove only after initial rinse, and continue rinsing eyes for at least 15 minutes. If irritation occurs or persists, consult a physician.

Skin Contact: In case of skin contact, while wearing protective gloves, carefully remove any contaminated clothing, including shoes, and wash skin thoroughly with soap and water. If irritation or symptoms occur or persist, consult a physician.

Inhalation: Remove to fresh air. If any trouble breathing, get immediate medical attention. Administer artificial respiration if breathing has ceased. If irritation or symptoms occur or persist, consult a physician.

Ingestion: Not applicable under normal use.

Notes for the Doctor: Any treatment that might be required for overexposure should be directed at the control of symptoms and the clinical conditions.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Water, ammonium phosphate, sand.

Unsuitable Extinguishing Media: Heavy water (or jet) stream may cause dust to become airborne and create a flash fire hazard or an explosive atmosphere.

Firefighting Procedures: Follow established procedures for extinguishing wood source fire.

Unusual Fire and Explosion Hazard: Hardwood plywood does not present an explosion hazard Sawing, sanding, or machining of hardwood plywood can produce wood dust as a by-product which may present an explosion hazard if a dust cloud contacts an ignition source**.** An airborne concentration of 40 grams of wood dust per cubic meter of air is often used as the LEL for wood dust. OSHA interprets the explosive level as having no visibility within 5 feet or less.

Hazardous Combustion Products: Burning of Hardwood plywood can result in carbon monoxide, carbon monoxide, hydrogen cyanide, aldehydes, organic acids, and polynuclear aromatic compounds.

Further Information: Flash point: 600^{o}F for wood.
Auto- ignition temp.: Varies (typically 400^{o}F to 500^{o}F (204^{o}-260^{o}C)
Explosive limits in air: N/A for hardwood plywood. 40 g/m^{3} (LEL) for wood dust.

NFPA Rating (Scale 0-4): Health = 2 Fire = 1 Reactivity = 0

SECTION 6: ACCIDENTAL RELEASE MEASURES

Emergency Procedures:	Evacuate personnel to safe areas. Remove all sources of ignition. Take precautionary measures against static discharges and against environmental release.
Personal Precautions and Protective Equipment:	Pick up, vacuum, or sweep spills for recovery and/or disposal. Avoid generation of dust during clean-up. Wear goggles or safety glasses when manufacturing or machining any wood product. Wear NIOSH/MSHA approved respirator when the allowable limits may be exceeded. Other protective equipment, such as gloves and outer garments may be needed, depending on dust conditions
Environmental Precautions:	Do not allow product to reach ground water, water courses, sewage, or drainage systems during clean-up.
Methods and Materials for Containment and Clean-up:	All spills should be handled according to site requirements and based on precautions cited in the SDS. In the case of liquids, use proper absorbent materials. For laboratories and small-scale operations, incidental spills within a hood or enclosure should be cleaned by using a HEPA filtered vacuum or wet cleaning methods as appropriate. For large dry or liquid spills or those spills outside enclosure or hood, appropriate emergency response personnel should be notified. In manufacturing and large-scale operations, HEPA vacuuming prior to wet mopping or cleaning is required. See Sections 9 and 10 for additional physical, chemical, and hazard information.
Other Information:	No further information is available.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling:	No special precautions for handling product. Use good safety and industrial hygiene practices. Avoid creating dusty conditions. Provide good ventilation where dust conditions cannot be avoided during cleanup. Place recovered wood dust in a container for proper disposal.

Conditions for Safe Storage: Store in well ventilated area. Keep away from sources of ignition as dried wood dust may pose a combustible dust hazard..

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Guideline:

Exposure Limits:

Component	CAS No.	Agency	Exposure Limits
Wood Dust (all soft and hard woods)	Not listed RTECS #: ZC9850000	OSHA	PEL-TWA 15 mg/m^3 (total dust)
		OSHA	PEL-TWA 5 mg/m^3 (respirable dust)
		OSHA	PEL-TWA 5 mg/m^3 (recommended softwood and hardwood; see footnote[1] below)
		OSHA	STEL 10 mg/ mg/m^3 (recommended softwood and hardwood; ; see footnote below)
		ACGIH	TLV-TWA 1 mg/m^3 (certain hardwoods);
		ACGIH	TLV-TWA 5 mg/m^3 (softwood)
		ACGIH	TLV-STEL 10 mg/m^3

Engineering Controls: Provide adequate ventilation and exhaust to keep airborne contaminant concentration levels below the OSHA PELs.

Eye/Face Protection: Wear goggles or safety glasses when manufacturing or machining any wood product.

Skin Protection: Wear protective gloves such as rubberized cloth, canvas or leather gloves to minimize potential mechanical irritation

[1] In AFL-CIO v. OSHA 965 F. 2d 962 (11th Cir. 1992), the court overturned OSHA's 1989 Air Contaminants Rule, including the specific PELs for wood dust that OSHA had established at that time. The 1989 PELs were: TWA - 5 mg/m^3; STEL (15 min.) - 10.0 mg/m^3(all soft and hard woods except Western red cedar); Western red cedar TWA-2.5 mg/m^3. Wood dust is now officially regulated as an organic dust under the Particulates Not Otherwise Regulated (PNOR) or Inert or Nuisance Dust categories at PELs noted under PART II of this MSDS. However, a number of states have incorporated provisions of the 1989 standard in their state plans. Additionally, OSHA has announced that it may cite companies under the OSH Act General Duty Clause under appropriate circumstances for non-compliance with the 1989 PELs.V1.2

from handling materials. Outer garments which cover the arms may be desirable in extremely dusty areas.

Respiratory Protection: Wear NIOSH/MSHA approved dust respirator when the allowable limits may be exceeded.

General Hygiene Considerations: Prevent/avoid creating/breathing dust. Wash after handling. Do not eat, drink, or smoke while manufacturing or installing this product.

Environmental Exposure Control: No data available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical Description: Hardwood veneers, unfinished and flat line UV finished multi-ply composite wood panels consisting of various combinations of hardwood or decorative veneer faces, bonded to other wood veneers using adhesives containing no added formaldehyde. Generally used in cabinets, furnishings, flooring, and in other non-structural applications. Typically provided as 50"X100" lay-on hardwood veneers, and 4' X 8' hardwood panels. Other dimensions of hardwood plywood and veneers are available. Thickness of products range from 1/42" of an inch to over 1".

Appearance/Odor: Normal for natural wood. Light to dark in color. Color and odor vary by species and expired time since processing.

Safety Relevant Basic Data

pH	Not applicable
Melting point/freezing point	Not applicable
Initial boiling point and boiling range	Not applicable
Auto- ignition temp.:	Varies (typically 400^{o}F to 500^{o}F (204^{o}-260^{o} C)
Explosive limits in air:	N/A for hardwood plywood. 40 g/m^{3}(LEL) for wood dust.
Flash point	600^{o}F for wood.
Evaporation rate	Not applicable
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits	Not applicable
Vapour pressure	Not applicable
Vapour density	Not applicable

Relative density	Not applicable
Specific gravity	Usually less than 1, but varies depending on wood species and moisture content.
Solubility(ies)	Insoluble.
Partition coefficient: n-octanol/water	Not applicable
Viscosity	Not applicable

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable at normal temperature and storages condition.

Conditions to avoid: Avoid open flame. Product may ignite at temperatures in excess of 400^{o}F, depending on length of time of exposure.

Incompatible materials: Oxidizing agents and drying oils.

Hazardous decomposition products: Thermal and/or thermal oxidative decomposition of wood can produce irritating and toxic fumes and gases, including carbon monoxide, hydrogen cyanide, aldehydes, organic acids, and polynuclear aromatic compounds.

Hazardous polymerization: Will not occur.

Sensitivity to static discharge: May cause explosion in critical concentrations and conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicological data have not been determined specifically for this product. Individual component information is listed below.

Acute Effects*:*

Wood dust: No data available.

Eye Irritation: Wood dust can cause mechanical irritation.

Skin Irritation: Depending on species, wood dust may cause dermatitis on prolonged, repetitive contact.

Respiratory Irritation: Wood dust may cause nasal dryness and/or irritation. Coughing, sneezing, wheezing, sinusitis, prolonged colds, and headaches have also been reported. It may aggravate

	pre-existing respiratory conditions or allergies. Wood dust may also cause nasal obstruction.
Respiratory Sensitization:	Wood dust may cause respiratory sensitization and/or irritation. Pre-existing respiratory disorders may be aggravated by exposure.
Skin Sensitization:	Wood dust from various species of wood may evoke allergic contact dermatitis in sensitized individuals.
Carcinogenicity:	Prolonged exposure to wood dust has been reported by some observers of European furniture workers to be associated with nasal cancer. IARC classifies wood dust as a carcinogen to humans (Group 1). This classification is based primarily on IARC's evaluation of increased risk in the occurrence of adenocarcinomas of the nasal cavities and paranasal sinuses associated with exposure to wood dust. IARC did not find sufficient evidence to associate cancers of the oropharynx, lung, lymphatic, and hematopoietic systems, stomach, colon, or rectum with exposure to wood dust. The National Toxicology Program (NTP) has also listed wood dust as a known human carcinogen. Wood dust is not listed as a carcinogen by ACGIH or OSHA. A large case control nasal cancer mortality study in North Carolina, Mississippi, Washington and Oregon (1962-1977) did not demonstrate an association between nasal cancer and occupations normally associated with wood dust.
Mutagenicity:	No data available.
Reproductive Effects:	No data available.
Specific Target Organ Toxicity Single Exposure:	May cause respiratory irritation.
Specific Target Organ Toxicity Repeated Exposure:	May cause damage to organs (respiratory system) through prolonged exposure.
Target Organs:	Eyes, skin, respiratory system.
Routes of Exposure:	Inhalation, dermal, eye.

Signs and Symptoms of Exposure:
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product. The ecological assessment of this material is based on an evaluation of wood dust component.

Ecotoxicity (Aquatic and Terrestrial): No data available for wood dust.
Persistence/Degradability: Wood dust would be expected to be biodegradable.
Bioaccumulation/Accumulation: No data available for wood dust.

Mobility in Soil: No data available.
Results of PBT and vPvB Assessment: No data available.
Other Adverse Effects: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods: Disposal must be in accordance with applicable federal, state/provincial, and/or local regulations. Incineration is the preferred method of disposal, when appropriate. Disposal is the responsibility of the generator.
Contaminated Packaging: Disposal must be in accordance with applicable federal, state/provincial, and/or local regulations.

SECTION 14: TRANSPORT INFORMATION

This material is not regulated for transportation when it is shipped without mixture with other hazardous components. This classification is based on the evaluation of available information until full testing is completed or additional information is available to further classify hazards for transportation. Therefore, the use of PG I UN-specification packaging is recommended to ensure safe transportation of this material.

US DOT (Ground) No data available
Proper Shipping Description: No data available
Canadian TDG (Ground) No data available
Proper Shipping Description: No data available
ICAO (Air) No data available
Proper Shipping Description: No data available
IMDG (Water) No data available
Proper Shipping Description: No data available

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

United States

Wood dust (CAS# NA)	
Listed on SARA Section 313 (Specific toxic chemical listing). SARA Section 311/312 Hazard Class	Immediate (acute) health hazard Delayed (chronic) health hazard
Listed on OSHA	Wood products are not hazardous under the criteria of the federal OSHA Hazard communication Standard 29 CFR 1910.1200. However wood dust generated by sawing, sanding or machining activities may be considered hazardous.
Listed on U.S. – California – Proposition 65 – Carcinogens List	**Warning**: Drilling, sawing, sanding or machining wood products generates wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. California Health and Safety Code Section 25249.6.

Canada

Wood dust (CAS# NA) Listed on the Canadian DSL (Domestic Substances List) inventory	
WHMIS Classification	Controlled Product: D2A – Wood dust: IARC Group 1

SECTION 16: OTHER INFORMATION

Disclaimer This document has been prepared based on data considered to be accurate at date of preparation. No warranty is made as to the accuracy or completeness of the foregoing data and safety information. User is responsible to evaluate all available information when using product for any particular use and to comply with all laws and regulations.

Preparation Date: September 8, 2015

Revision Date: N/A

Glossary:

ACGIH - American Conference of Governmental Industrial Hygienists
Carc - Carcinogenic
CAS - Chemical Abstract Service
CLP – The Classification, Labelling and Packaging Regulation
DOT - Department of Transportation
EPA = U.S. Environmental Protection Agency

Eye Irrit - Eye Irritation
GHS - Globally Harmonized System
HEPA - High Efficiency Particulate Arresting
IARC - International Agency for Research on Cancer, IARC Group 1 or 2A
LD50 - Lethal Dose, 50% for oral and dermal
LC50 - Lethal Concentration, 50% for inhalation
NA – Not Available
NTP - National Toxicology Program
OSHA – Occupational Safety and Health Administration
PBT - Persistent Bioaccumulative Toxic
PEL – Permissible Exposure Limit
PG - Packing Group
PPE - Personal Protective Equipment
Resp Sens – Respiratory Sensitization
SARA – Superfund Amendments and Reauthorization Act
Skin Irrit - Skin Irritation
Skin Sens – Skin Sensitization
STEL – Short-Term Exposure Limit (15 minutes)
STOT - Specific Target Organ Toxicity
TLV – Threshold Limit Value
TSCA - Toxic Substances Control Act
TWA - Time Weighted Average
UN - United Nations
vPvB - Very Persistent and Very Bioaccumulative
WHMIS - (Canada) Workplace Hazardous Materials Information System

Safety Data Sheet (SDS)

Weyerhaeuser

Wood and Wood Dust (without chemical treatments or resins/additives), including Untreated Lumber (all species and grades), Logs, Chips, and Sawdust

1. Identification

TRADE NAME(S):	Wood and Wood Dust (without chemical treatments or resins/additives), including Untreated Lumber (all species and grades), Logs, Chips, and Sawdust NOTE: For wood products containing chemical treatments or resins/additives, see specific SDS and label for those products
SYNONYMS and/or GRADES:	None
PRODUCT USES:	Building materials, wood pulp raw material, fuel, landscaping material
CHEMICAL NAME/CLASS:	Wood Products
MANUFACTURER'S NAME:	Weyerhaeuser
ADDRESS:	220 Occidental Ave S., Seattle, WA 98104
EMERGENCY PHONE (DOT):	(844) 523-4081 (3E Company)
BUSINESS PHONE:	(206) 539-3910
INTERNET ACCESS:	See Section 16
REVISED DATE:	August 27, 2018

2. Hazard(s) Identification

Signal Word: DANGER

NOTE: Wood dust may become hazardous while being transported or handled by downstream users. Products not containing wood dust are not hazardous as shipped but may become hazardous as the result of downstream activities (e.g. cutting, sanding) which creates small particles. Potential hazards are described below.

2. Hazard(s) Identification (cont'd.)

Classification	Hazard Statement(s)	Pictogram(s)
HEALTH Carcinogen- Category 1 (for non-lumber products If crystalline silica present) (H350) * Carcinogen- Category 1A (H350) *	Crystalline silica may cause cancer of the lung Wood dust may cause nasopharyngeal cancer and/or cancer of the nasal cavities and paranasal sinuses by inhalation	
Skin Irritation Category 2 (H315) Specific Target Organ Toxicity- Single Exposure (STOT) Category 3 (H335)	Causes skin irritation May cause respiratory irritation	
Eye Irritation Category 2B (H320)	Causes eye irritation	None
Combustible Dust (OSHA Defined Hazard)	If product contains or is converted to small particles during further processing, handling, or by other means, may form combustible dust concentrations in air	None

***Hazard codes (GHS)

HMIS Rating (Scale 0-4):	**Health =**	2*	**Fire =**	1	**Physical Hazard =**	0
NFPA Rating (Scale 0-4):	**Health =**	1	**Fire =**	1	**Reactivity =**	0

Precautionary Statement(s):

Prevention Statements**:**

P202: Do not handle until all safety precautions have been read and understood.
P210: Keep away from sparks, flame or other heat sources.
P243: Take precautionary measures against static discharge.
P261+284: Avoid breathing dust. In case of inadequate ventilation wear an approved respirator suitable for conditions of use.
P271: Use outdoors or in a well-ventilated area.
P280: Wear appropriate protective equipment for eye and skin exposure.

2. Hazard(s) Identification (cont'd.)

Response Statements:

P304+P340+P313: If inhaled and breathing becomes difficult, remove person to fresh air and keep comfortable for breathing. If symptoms persist, call a doctor or other qualified medical professional.
P333+P313: If skin irritation or rash occurs get medical advice/attention.
P352+P264: If on skin wash with plenty of soap and water.
P362+P364: Take off contaminated clothing and wash before reuse.
P305+P351+P338: If in eyes, rinse cautiously for several minutes. Remove contact lenses if present and easy to do so.

Disposal:

P501: Dispose of in accordance with federal, state and local regulations.

Ingredients of Unknown Acute Toxicity (>1%): NAP

3. Composition/Information on Ingredients

Ingredient(s)s	CAS#	Wt.%
Wood (wood dust, softwood or hardwood, logs, wood chips)	None	85-100

Common names: Untreated lumber, untreated wood, sawdust, sander dust, raw logs, wood chips.

NOTE: Some wood products such as logs, chips and sawdust may include additional material such as soil and rock fragments which may contain particles of crystalline silica.

4. First Aid Measures

Inhalation: Remove to fresh air if respiratory symptoms are experienced. Seek medical help if persistent irritation, severe coughing, breathing difficulty or other serious symptoms occur.

Eye Contact: Treat dust in eye as a foreign object. Flush with water to remove dust particles. Remove contact lenses if present and easy to do so. Avoid touching or rubbing eyes to avoid further irritation or injury. Seek medical help if irritation persists.

Skin Contact: Wood dust may elicit contact dermatitis. Seek medical help if rash, irritation or dermatitis persists.

Skin Absorption: Not known to be absorbed through the skin.

Ingestion: Not applicable under normal use.

Symptoms or Effects:

Acute Symptoms/Effects – Dust may cause mechanical irritation of the eyes and respiratory system. Dust can cause physical obstructions in the nasal passages, resulting in dryness of nose, dry cough, and sneezing.

Delayed Symptoms/Effects – Unique delayed effects are not anticipated after exposure. See Section 11 for additional information on chronic effects.

5. Fire-fighting Measures

Extinguishing Media and Restrictions: Water, carbon dioxide and sand.

Specific Hazards, Anticipated Combustion Products: Thermal decomposition (i.e. smoldering, burning) products include carbon monoxide, carbon dioxide, aliphatic aldehydes, terpenes, and polycyclic aromatic hydrocarbons.

Autoignition Temperature: Variable [typically 400°-500°F (204°-260°C)]

Special Firefighting Equipment/Procedures: No special equipment anticipated. Beware of potential combustible dust explosion hazard.

5. Fire-fighting Measures (cont'd.)

Unusual Fire and Explosion Hazards: Depending on moisture content, particle diameter and concentration, wood dust may pose a flash fire or deflagration hazard. If suspended in air in an enclosure or container and ignited, an explosion may occur due to the development of internal pressure causing rupture. An airborne concentration of 40 grams (40,000 mg) of dust per cubic meter of air is often used as the Minimum Explosible Concentration (MEC) for wood dusts. Conduct regular housekeeping inspections and cleaning to prevent excessive dust accumulations. Design and maintain control equipment to minimize fugitive combustible dust emissions. Ensure that ventilation systems are operating properly to capture, transport and contain combustible dust while controlling ignition sources. Reference NFPA 652 "Standard on the Fundamentals of Combustible Dust".

6. Accidental Release Measures

Steps to be taken in case Material Is Released or Spilled: Sweep or vacuum up for recovery and disposal. Avoid creating dusty conditions whenever feasible. Maintain good housekeeping to avoid accumulation of wood dust on exposed surfaces. Use approved filtering facepiece respirator ("dust mask") or higher levels of respiratory protection as indicated and goggles where ventilation is not possible and exposure limits may be exceeded or for additional worker comfort.

7. Handling and Storage

Precautions to be taken in Handling and Storage: Dried wood dust may pose a combustible dust hazard. Keep away from ignition sources. Avoid eye contact. Avoid prolonged or repeated contact with skin. Avoid prolonged or repeated breathing of wood dust. Store in well-ventilated, cool, dry place away from open flame.

8. Exposure Control Measures/Personal Protection

Exposure Limits/Guidelines:

Ingredient(s)	Agency	Exposure Limit(s)	Comments
Wood (wood dust, softwood or hardwood, logs, wood chips)	OSHA	PEL-TWA 15 mg/m^3 (see footnote [A] below)	Total Dust (PNOR)
	OSHA	PEL-TWA 5 mg/m^3 (see footnote [A] below)	Respirable dust fraction (PNOR)
	ACGIH	TLV-TWA 1 mg/m^3	Inhalable fraction

[A] In AFL-CIO v OSHA, 965 F. 2d 962 (11th Cir. 1992), the Court overturned OSHA's 1989 Air Contaminants Rule, including the specific PEL's for wood dust that OSHA had established at that time. The 1989 vacated PEL's were: 5 mg/m^3 PEL-TWA and 10 mg/m^3 STEL (15 min), all softwood and hardwood except Western Red Cedar. Wood dust is now regulated by OSHA as "Particulates Not Otherwise Regulated" (PNOR), which is also referred to as "nuisance dust". However, some states have regulated wood dust PEL's in their state plans. Additionally, OSHA indicated that it may cite employers under the OSH Act general duty clause in appropriate circumstances.

Ventilation:

LOCAL EXHAUST – Provide local exhaust as needed so that exposure limits are met. Ventilation to control dust should be considered where potential explosive concentrations and ignition sources are present. The design and operation of any exhaust system should consider the possibility of explosive concentrations of wood dust within the system. See "SPECIAL" section below. Use of tool mounted exhaust systems should also be considered, especially when working in enclosed areas.

8. Exposure Control Measures/Personal Protection (cont'd.)

MECHANICAL (GENERAL) – Provide general ventilation in processing and storage areas so that exposure limits are met.
SPECIAL – Ensure that exhaust ventilation and material transport systems involved in handling this product contain explosion relief vents or suppression systems designed and operated in accordance with applicable standards if the operating conditions justify their use.
OTHER ENGINEERING CONTROLS – Cutting and machining of product should preferably be done outdoors or with adequate ventilation and containment.

Personal Protective Equipment:
RESPIRATORY PROTECTION – Use filtering facepiece respirator ("dust mask") tested and approved under appropriate government standards such as NIOSH (US), CSA (Canada), CEN (EU), or JIS (Japan) where exposure limits may be exceeded or for additional worker comfort or symptom relief. Use respiratory protection in accordance with jurisdictional regulatory requirements similar to the OSHA respiratory protection standard 29CFR 1910.134 following a determination of risk from potential exposures which includes consideration of potential respirable crystalline silica exposures.
EYE PROTECTION – Approved goggles or tight fitting safety glasses are recommended when excessive exposures to dust may occur (e.g. during clean up) and when eye irritation may occur.
PROTECTIVE GLOVES – Cloth, canvas, or leather gloves are recommended to prevent direct contact and to minimize potential slivers and mechanical irritation from handling product.
OTHER PROTECTIVE CLOTHING OR EQUIPMENT – Outer garments which cover the arms may be desirable in extremely dusty areas.
WORK/HYGIENE PRACTICES – Follow good hygienic and housekeeping practices. Clean up areas where wood dust settles to avoid excessive accumulation of this combustible material. Minimize compressed air blowdown or other practices that generate high airborne-dust concentrations.

9. Physical/Chemical Properties

Appearance: Light to dark colored, granular solid, saw dust, wood chips, logs and untreated lumber (all species and grades). Color and odor are dependent on the wood species and time since any wood dust was generated.

Odor/Odor Threshold(s):	NAV
pH:	NAP
Melting/Freezing Point:	NAP
Boiling Point (@ 760 mm Hg) and Range:	NAP
Flash Point:	NAP
Evaporation Rate:	NAP
Flammability:	NAV
Lower/Upper Explosive Limits:	40,000 mg of dust per cubic meter of air is often used as the LEL for wood dusts.
Vapor Pressure (mm Hg):	NAP
Vapor Density (air = 1; 1 atm):	NAP
Relative Density:	NAP
Solubility:	<0.1
Partition Coefficient (n-octanol/water):	NAP
Autoignition Temperature:	Variable [typically 400°-500°F (204°-260°C)]
Decomposition Temperature:	NAV
Viscosity:	NAP
Other Properties:	NAP

10. Stability and Reactivity

Reactivity: NAP

Hazardous Polymerization: ☐ May occur ☒ Will not occur

Stability: ☐ Unstable ☒ Stable

Conditions to Avoid: Avoid all sources of ignition.

Incompatibility (Materials to Avoid): Avoid contact with oxidizing agents and drying oils.

Hazardous Decomposition or By-Products: Natural decomposition of organic materials such as wood may produce toxic gases and an oxygen deficient atmosphere in enclosed or poorly ventilated areas. Spontaneous and rapid hazardous decomposition will not occur.

Sensitivity to Static Discharge: Airborne wood dust may be ignited by a static discharge depending on airborne concentrations, particle size and moisture content.

11. Toxicological Information

Likely Route(s) of Exposure:

- ☐ Ingestion:
- ☒ Skin: Dust
- ☒ Inhalation: Dust
- ☒ Eye: Dust

Signs and Symptoms of Exposure: See section 4

Wood Dust - NTP: According to its Report on Carcinogens, Fourteenth Edition, NTP states, "Wood dust is known to be a human carcinogen based on sufficient evidence of carcinogenicity from studies in humans". An association between wood dust exposure and cancer of the nasal cavity has been observed in case reports, cohort studies, and case-control studies that specifically addressed nasal cancer. Associations with cancer of the nasal cavities and paranasal sinuses were observed both in studies of people whose occupations are associated with wood dust exposure and in studies that directly estimated wood dust exposure. This classification is based primarily on increased risk in the occurrence of adenocarcinomas of the nasal cavities and paranasal sinuses associated with exposure to wood dust. The evaluation did not find sufficient evidence to associate cancers of the oropharynx, hypopharynx, lung, lymphatic and hematopoietic systems, stomach, colon or rectum with exposure to wood dust. There is inadequate evidence for the carcinogenicity of wood dust from studies in experimental animals according to NTP.

Silica - NTP: According to its Report on Carcinogens, Fourteenth Edition, NTP classifies "Silica, Crystalline (respirable size)" as Known to be a human carcinogen.

Wood Dust: IARC – Group 1: Carcinogenic to humans; sufficient evidence of carcinogenicity. This classification is primarily based on studies showing an association between occupational exposure to wood dust and adenocarcinoma to the nasal cavities and paranasal sinuses. IARC did not find sufficient evidence of an association between occupational exposure to wood dust and cancers of the oropharynx, hypopharynx, lung, lymphatic and hematopoietic systems, stomach, colon or rectum.

Silica: IARC – Group 1: Carcinogenic to humans; sufficient evidence of carcinogenicity. IARC concluded that "crystalline silica in the form of quartz or cristobalite dust is carcinogenic to humans (Group 1)".

Carcinogenicity Listing(s):

- ☒ NTP: Wood dust, Known Human Carcinogen.
- ☒ IARC Monographs: Wood dust, Group 1 - Carcinogenic to Humans.
- ☒ OSHA Regulated: Crystalline Silica - 29 CFR 1910.1053

11. Toxicological Information (cont'd.)

Toxicity Data:
Wood dust (softwood or hardwood)
Dusts generated from sawing, sanding or machining the product may cause respiratory irritation, nasal dryness and irritation, coughing and sinusitis. NTP and IARC (Group 1) classify wood dust as a human carcinogen. See Section 2 above.
Target Organs: Eyes, skin, and respiratory system.
Note: Weyerhaeuser evaluated the studies referenced in the ACGIH® TLV® Documentation for Wood Dust and others which included potential allergenic references for wood species which may cause skin or respiratory sensitization. There are a limited number of studies of highly variable consistency which reference sensitization from some species of wood. When the total weight of evidence is considered this product is considered to be an eye, skin and respiratory irritant and not a respiratory or skin sensitizer according to health hazard classification criteria.

12. Ecological Information

Ecotoxicity: NAV for finished product.
Biopersistance and Degradability: Wood in this product would be expected to be biodegradable.
Bioaccumulation: Not expected to bioaccumulate.
Soil Mobility: NAV
Other Adverse Effects: NAP

13. Disposal Considerations

Waste Disposal Method: Dry land disposal or incineration is acceptable in most areas. It is, however, the user's responsibility to determine at the time of disposal whether your waste meets any jurisdictional criteria. Note that wood dust may pose a combustible dust hazard.

14. Transport Information

Mode: (air, land, water) Not regulated as a hazardous material by the U.S. Department of Transportation. Not listed as a hazardous material in Canadian Transportation of Dangerous Goods (TDG) regulations. Not regulated as a hazardous material by IMDG or IATA regulations concerning the transport of hazardous materials.

UN Proper Shipping Name:	NAP
UN/NA ID Number:	NAP
Hazard Class:	NAP
Packing Group:	NAP
Environmental Hazards (Marine Pollutant):	NAP
Special Precautions	NAP

15. Regulatory Information

TSCA: NAP
CERCLA: NAP
DSL: NAP
OSHA: Wood products are not hazardous under the criteria of the federal OSHA Hazard Communication Standard 29 CFR 1910.1200. However, wood dust generated by sawing, sanding or machining activities is considered hazardous.

15. Regulatory Information (cont'd.)

STATE RIGHT-TO-KNOW:
California Proposition 65 –

WARNING: This product can expose you to chemicals including wood dust which are known to the State of California to cause cancer, and methanol, which are known to the State of California to cause birth defects or other reproductive harm. Drilling, sawing, sanding or machining wood products can expose you to wood dust. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to www.P65Warnings.ca.gov and www.P65Warnings.ca.gov/wood. This product may also release silica, crystalline (airborne particles of respirable size), a chemical known to the state of California to cause cancer.

Pennsylvania – Wood dust and crystalline silica appear on Pennsylvania's Appendix A, Hazardous Substance List.

New Jersey – Wood dust and crystalline silica appear on New Jersey's Environmental Hazardous Substance List.

SARA 313 Information: This material does not contain any chemical ingredient (s) that exceed the de minimis reporting levels established by SARA Title III, section 313 and 40 CFR section 372.

SARA 311/312 Hazard Category: This material has been reviewed according to the EPA "Hazard Categories" promulgated under SARA Title III Sections 311 and 312 and is considered, under applicable definitions, to meet the following categories:

An immediate (acute) health hazard	Yes
A delayed (chronic) health hazard	Yes
A corrosive hazard	No
A fire hazard	No
A reactivity hazard	No
A sudden release hazard	No

FDA: Not intended for use as a food additive or indirect food contact item.

WHMIS Classification: Wood and products made from wood are exempt from WHMIS per the Hazardous Products Act (HPA). However, wood dust released during the use or modifications of wood products may be hazardous. See Section 2 for health and combustible dust hazard information.

16. Other Information

Date Prepared: 11/05/2010
Date Revised: 08/27/2018
Prepared By: Weyerhaeuser Company Health and Safety.
Weyerhaeuser SDS available on:
http://www.wy.com/sustainability/environment/product-stewardship/safety-data-sheets/

User's Responsibility: The information contained in this Safety Data Sheet is based on the experience of occupational health and safety professionals and comes from sources believed to be accurate or otherwise technically correct. It is the user's responsibility to determine if the product is suitable for its proposed application(s) and to follow necessary safety precautions. The user has the responsibility to ensure that the most current SDS is used.

Definition of Common Terms:

ACGIH®	=	American Conference of Governmental Industrial Hygienists
C	=	Ceiling Limit
CAS#	=	Chemical Abstracts System Number
DOT	=	U. S. Department of Transportation

16. Other Information (cont'd.)

DSL	=	Domestic Substance List
EC#	=	Identifying Number Assigned to Chemicals Contained in the European Inventory of Existing Chemical Substances (EINECS)
EC_{50}	=	Effective Concentration That Inhibits the Endpoint to 50% of Control Population
EPA	=	U.S. Environmental Protection Agency
GHS	=	Globally Harmonized System of Classification and Labelling of Chemicals
HMIS	=	(Canada) Hazardous Materials Identification System
HNOC	=	Hazards Not Otherwise Classified
IARC	=	International Agency for Research on Cancer
IATA	=	International Air Transport Association
IMDG	=	International Maritime Dangerous Goods
LC_{50}	=	Concentration in Air Resulting in Death To 50% of Experimental Animals
LCLo	=	Lowest Concentration in Air Resulting in Death
LD_{50}	=	Administered Dose Resulting in Death to 50% of Experimental Animals
LDLo	=	Lowest Dose Resulting in Death
LEL	=	Lower Explosive Limit
LFL	=	Lower Flammable Limit
MSHA	=	Mine Safety and Health Administration
NAP	=	Not Applicable
NAV	=	Not Available
NIOSH	=	National Institute for Occupational Safety and Health
NFPA	=	National Fire Protection Association
NPRI	=	(Canada) National Pollution Release Inventory
NTP	=	National Toxicology Program
OSHA	=	Occupational Safety and Health Administration
PEL	=	Permissible Exposure Limit
PNOR	=	Particulate Not Otherwise Regulated
PNOS	=	Particulate Not Otherwise Specified
RCRA	=	Resource Conservation and Recovery Act
STEL	=	Short-Term Exposure Limit (15 minutes)
STP	=	Standard Temperature and Pressure
TCLo	=	Lowest Concentration in Air Resulting in a Toxic Effect
TDG	=	(Canada) Transportation of Dangerous Goods
TDLo	=	Lowest Dose Resulting In a Toxic Effect
TLV	=	Threshold Limit Value
TSCA	=	Toxic Substance Control Act
TWA	=	Time-Weighted Average (8 hours)
UFL	=	Upper Flammable Limit
WHMIS	=	(Canada) Workplace Hazardous Materials Information System

Wood and Wood Dust (without chemical treatments or resins/additives), including Untreated Lumber (all species and grades), Logs, Chips, and Sawdust

Danger

Wood dust may cause nasopharyngeal cancer and/or cancer of the nasal cavities and paranasal sinuses by inhalation. May cause respiratory, skin and eye irritation.

May form combustible dust concentrations in air if small particles become airborne or are formed during processing or handling

Precautions: Do not handle until all safety precautions have been read and understood. Use outdoors or in a well-ventilated area. Avoid breathing dust and wear appropriate protective equipment for respiratory, skin or eye exposures. Prevent dust release and accumulations to minimize hazards. Take off contaminated clothing and wash before reuse. Keep dust away from ignition sources such as heat, sparks, and flame.

First Aid:

If in eyes, rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Contact a qualified medical professional if symptoms persist.

If on skin, wash with soap and water. If skin irritation or rash occurs, get medical advice/attention.

Inhalation, if experiencing respiratory symptoms, remove to fresh air. Contact a qualified medical professional for serious or persistent respiratory symptoms.

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Label for Wood and Wood Dust products. See SDS 8/2018 for additional information.